#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

70.28 File #:

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006404 Address: 333 Burma Road **Date Inspected:** 24-Apr-2009

City: Oakland, CA 94607

**Project Name:** SAS Superstructure OSM Arrival Time: 1130 **OSM Departure Time:** 1930 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Japan Steel Works **Location:** Muroran, Japan

**CWI Name: CWI Present:** Yes Chung Fu Kuan No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower, Jacking and Deviation Saddles

## **Summary of Items Observed:**

On this date, 4/24/09, Caltrans OSM Quality Assurance Inspector (QAI) Mike Brcic was present during the times noted above for observations relative to the work being performed on cast sections and their associated built up plate sections in either the Fabrication shop #4 or Foundry Shop at Japan Steel Works.

## West Deviation Saddles:

W2E3 - Section undergoing welding in Fabrication shop #4. T.Watanabe 08-5169 and T.Inoue 08-5163 are Shielded metal arc welding (SMAW) joints E3Y-4U-2 and E3Y-4U-1 respectively, in accord with procedure SJ-3011-7 (for non-standard joints), contract documents and special provisions, with 4.8 mm electrode.

W2W1 - Cast in Fabrication Shop #4, one man in process of grinding the buttered surface intended for 100mm X 100mm gussets used as bracing in upper part of trough. The built up section has had its beveled surface Magnetic Particle inspected, (dry, visible).

W2W2 - Built up plate portion is being welded, piece mark 5-2 (stem) to baseplate, joint W2Y-4V way of Flux Core Weld process (FCAW) by three welders, M.Inoue 92-5658, M.Matudate 08-5151 and S.Watanabe 08-5159 in the 1G position, 1.6mm weld wire, and procedure in use was SJ3011-4.

#### Tower Saddles:

T1-3 - Casting has returned from machine shop having had the buttered surfaces (cast ribs and stem) machined. An MT inspection is scheduled to ensure soundness of buttering. Now located in #4 Fabrication Shop. Carbon arcing of buttered radii taking place at this time, followed by mechanical grinding to its finished condition before fit up of Built up portion to cast.

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# East Saddles:

E2E1 - Cast is in process of shaping by way of mechanical grinding by three men, approximately 35% complete. E2W1 - Volumetric Ultrasonic testing being done to cast section in Foundry by H. Kohama (#86), angle beam testing utilizing a 60 degree transducer. It appears at this time that all contract documents, special provisions are

being met at this time.

Unless otherwise noted, all observations reported on this date appeared to be in general compliance with applicable contract documents.

# **Summary of Conversations:**

No significant conversations to report on this day.

# **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, 1(510)385-5910, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Brcic,Michael	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer